



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,556	07/22/2003	Kenji Shiraishi	240519US2	5911
22850	7590	11/02/2007		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER TRAN, NHAN T	
			ART UNIT 2622	PAPER NUMBER
			NOTIFICATION DATE 11/02/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary

Application No.

10/623,556

Applicant(s)

SHIRAISHI, KENJI

Examiner

Nhan T. Tran

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7/13/2007 & 8/21/2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4 and 10-13 is/are rejected.
- 7) ☒ Claim(s) 5-9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 July 0207 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1, 4, 10-15 have been considered but are moot in view of the new ground of rejection.
2. Upon further consideration, claims 3 & 4 previously objected as allowable subject matter has been withdrawn in view of the new ground of rejection. The Examiner regrets for any inconvenience caused by this withdrawal.

Specification

3. Amendments to specification filed 7/13/2007 are accepted.

Information Disclosure Statement

4. The information disclosure statement (IDS) submitted on 7/13/2007 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings

5. The replacement drawing of Fig. 1 filed on 7/13/2007 is accepted.

Claim Objections

6. Claims 1, 4-7, 10-13 are objected to because of the following informalities:

Regarding claim 1, in line 3 of this claim, the limitation "a feature-detection device" should be corrected to read as – **a feature detection device** – to be consistent with the rest of the claim and dependent claims. Further, in line 14, "the area photographed by said imaging device" should be corrected to read as – **areas photographed by said imaging device** --. Also, in the last three lines of this claim, the limitations "conducts the white balance control with a result of a feature detection from all area photographed by said imaging device when a mode which does not match with said zoom area and said feature detection area is selected." should be corrected to read as -- **conducts the white balance control with a result of a feature detection from all areas photographed by said imaging device when a mode which does not match with said zoom area and said feature detection area is selected.** --.

Regarding claim 4, in line 4 of this claim, "comprises;" should be corrected to read as -- **comprises:** --. Further, in the last three lines of this claim, "conducts the white balance control by use of said weighted result of the feature detection when the mode which does not match with said zoom area and said feature detection area is selected." should be corrected to read as -- **conducts the white balance control by use of said weighted result of the feature detection when the mode which does not match with said zoom area and said feature detection area is selected.** --

Regarding claims 5, 7, 10-13, each of these claims recites "comprises;" which should be corrected to read as – **comprises:** --. Additionally, **claims 10-12 are duplicated** and dependent from claim 1. Thus, two of these claims 10-12 should be canceled or corrected accordingly.

Regarding claim 6, **commas** are required in front and at the end of "which is not included in said zoom area." in line 3 of this claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 4, 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujii et al. (US 6,853,401) in view of Kaji et al. (US 6,476,868).

Regarding claim 1, Fujii discloses an imaging apparatus (a digital camera) comprising:

an imaging device (CCD 303 in Fig. 5) to photograph an image of an object and convert said image of the object into an electronic image signal;

a feature-detection device (WB circuit in Fig. 6) to detect a feature (light source feature) for a white balance control in accordance with said electronic image signal (see Figs. 13 & 14 and col. 10, lines 24-61);

a white balance control device (combined WB circuit 207 and controller 211 in Figs. 5 & 6) to carry out the white balance control based on a result of said feature detection device (col. 10, lines 24-61);

Art Unit: 2622

said imaging apparatus further comprising: a device (cursor 230 in Fig. 2) to select a zoom area (enlarged area Au in Figs. 20 & 21) of the image signal by said imaging device;

a device (display device 10 in Fig. 2) to display the image signal of the area selected by said zoom area selection device (Figs. 20 & 21);

a device (controller 211) to select an area (entire area shown in Fig. 13) to conduct the feature detection for said white balance control (col. 10, lines 23-61);

said feature detection device divides said feature detection area into several areas (Fig. 13), and conducts a feature detection in each divided area, respectively, wherein said white balance control device conducts the white balance control with a result of a feature detection from all areas (all areas shown in Fig. 13) photographed by said imaging device in a default mode which does not match said zoom area and said feature detection area (this is understood as regardless of locations of zoom area and the feature detection area, the white balance control conducts white balance with a result of feature detection area from all areas shown in a default mode as disclosed in Fig. 13 and col. 10, lines 23-61).

Fujii does not teach that said feature detection area selection device conducts the selection of said feature detection area in accordance with the area photographed by said imaging device and the area selected by said zoom area selection device, wherein said white balance control device is adapted to be capable of selecting as to whether the feature detection area selected by said feature detection area selection device and the zoom area selected by said zoom area selection device are an identical

Art Unit: 2622

area or not, and the white balance control device conducts a feature detection in each divided area, respectively, wherein said white balance control device conducts the white balance control without using a result of a feature detection for an area which is not included in said zoom area when a mode which matches said zoom area and said feature detection area is selected.

However, in the same field of endeavor, Kaji teaches an improvement for white balance control when a zoom area is selected. According to Kaji in Figs. 30, 31A & 31B, a feature detection for white balance is selected in accordance with areas photographed by an imaging device and the selected zoom area (A' in Figs. 31A & 31B), wherein the feature detection and the zoom area are determined as an identical area for a matching mode in which only the result of a feature detection within the zoom area is used for white balance control (see Kaji, col. 20, line 21 – col. 21, line 55). Such use of feature detection within the zoom area in the white balance control mode in Kaji optimizes phototaking assisting so as to improve the white balance control (see Kaji, col. 20, lines 36-40, 53-58).

Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Fujii and Kaji to provide a second mode for matching the feature detection area to the selected zoom area in addition to the default mode of using all areas for white balance control to arrive at the Applicant's claimed invention so that the white balance control would be optimized depending on photographing conditions.

Regarding claim 4, in the combination discussed in claim 1, Fujii also discloses that said feature detection device divides said feature detection area into several areas (Fig. 13), and conducts a feature detection in each divided area respectively; and wherein the imaging apparatus further comprises; a weighting setup device (controller 211) to set an influence degree of the white balance control to data in each area within said feature detection area (Fig. 6), and wherein said white balance control device conducts a weighting to a result of the feature detection in said each area in accordance with the weighting set by said weighting setup device, and conducts the white balance control by use of said weighted result of the feature detection when the mode which does not match said zoom area and said feature detection area is selected (see Fujii, col. 10, lines 23-61, wherein weighting to each sub-area is indicated by coefficients in the summations).

Regarding claims 10-13, Fujii in view of Kaji further teaches a live view function for confirming framing of electronic zoom until a time of photographing (see Fujii, Figs. 20 & 21 and Kaji, Figs. 31A & 31B), and wherein an operation result of said feature detection area selection device and a result of a white balance processing depending on a specific photographing condition are confirmed by a live view screen with a condition displaying said live view screen by said display device (see Fujii, Figs. 20 & 21, wherein condition of the displayed image is also displayed with marks and shape of image itself).

Regarding claims 14 & 15, these claims are also met by the analysis of claim 1.

Allowable Subject Matter

8. Claims 5-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhan T. Tran whose telephone number is (571) 272-7371. The examiner can normally be reached on Monday - Friday, 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Nhan Tran', with a long, sweeping horizontal line extending to the right.

NHAN T. TRAN
Patent Examiner